

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: BALLABS TEST NO. 14774.0

Luminaire Tested: **234ISL-3T8-CENTER LAMP OFF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: BALLABS TEST NO. 14774.0
Test Lab: BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: 234ISL-3T8-CENTER LAMP OFF
Description: 3/32W T8 LAMP 2x4'DIRECT RECESSED LUMINAIRE w/WHITE REFL
PERF DIFFUSER/OVERLAY w/OPEN CENTER 3.6"WHITE BLADE BAFFLE
SYLVANIA #QTP2x32T8/UNVPSN-TC WATTS=57
Light Source: -
F32T8/835/RS
Ballast/Driver: -

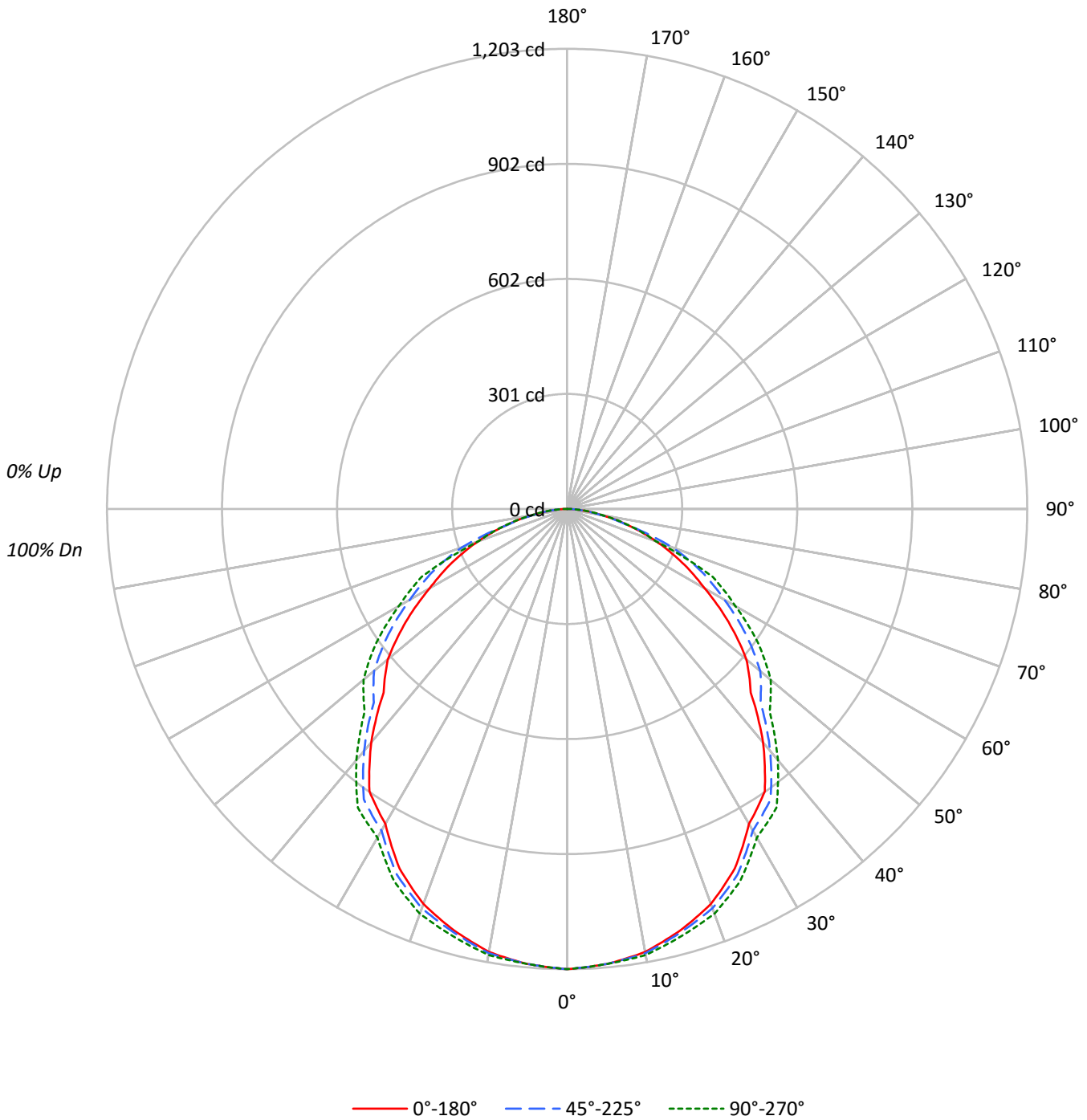
Summary

Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 3162.7 lumens
Efficiency: 53.6%
Efficacy: 55.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.31
Luminous Opening: Rectangular (W 1.94' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 57
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	64	64	64	64	62	62	62	62	60	60	60	57	57	57	55	55	55	54
1	59	56	54	52	57	55	53	51	53	51	49	50	49	48	49	47	46	45
2	53	49	45	42	52	48	45	42	46	43	41	44	42	40	43	41	39	38
3	49	43	39	36	47	42	38	35	41	37	35	39	36	34	38	35	33	32
4	45	38	34	30	43	38	33	30	36	33	30	35	32	29	34	31	29	28
5	41	34	30	26	40	34	29	26	33	29	26	32	28	25	31	28	25	24
6	38	31	26	23	37	30	26	23	29	25	23	29	25	22	28	25	22	21
7	35	28	23	20	34	28	23	20	27	23	20	26	22	20	25	22	20	19
8	33	26	21	18	32	25	21	18	25	21	18	24	20	18	23	20	18	17
9	31	24	19	16	30	23	19	16	23	19	16	22	19	16	22	18	16	15
10	29	22	18	15	28	22	17	15	21	17	15	20	17	15	20	17	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1706	1706	1706
5°	1700	1700	1700
10°	1693	1698	1705
15°	1675	1682	1697
20°	1658	1676	1699
25°	1622	1649	1677
30°	1557	1590	1624
35°	1560	1605	1651
40°	1475	1529	1586
45°	1362	1434	1502
50°	1350	1454	1533
55°	1273	1409	1506
60°	1177	1347	1441
65°	1114	1302	1409
70°	1028	1211	1020
75°	909	893	931
80°	735	702	776
85°	586	618	651



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	113.6	3.6	1.9
10°-20°	324.2	10.3	5.5
20°-30°	483.5	15.3	8.2
30°-40°	572.1	18.1	9.7
40°-50°	561.9	17.8	9.5
50°-60°	505.3	16.0	8.6
60°-70°	371.2	11.7	6.3
70°-80°	184.7	5.8	3.1
80°-90°	46.2	1.5	0.8
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	921.3	29.1	15.6
0°-40°	1493.4	47.2	25.3
0°-60°	2560.6	81.0	43.4
0°-90°	3162.7	100.0	53.6
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	3162.7	100.0	53.6

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1203	1203	1203	1203	1203	
5°	1194	1194	1194	1194	1194	113
15°	1141	1141	1146	1154	1156	322
25°	1037	1042	1054	1067	1072	476
35°	901	911	927	944	954	556
45°	679	690	715	735	749	534
55°	515	535	570	597	609	460
65°	332	355	388	408	420	328
75°	166	183	163	165	170	177
85°	36	35	38	40	40	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1203	1203	1203	1203	1203
5°	1194	1194	1194	1194	1194
10°	1176	1178	1179	1183	1184
15°	1141	1141	1146	1154	1156
20°	1099	1101	1111	1121	1126
25°	1037	1042	1054	1067	1072
30°	951	956	971	986	992
35°	901	911	927	944	954
40°	797	805	826	846	857
45°	679	690	715	735	749
50°	612	629	659	685	695
55°	515	535	570	597	609
60°	415	443	475	500	508
65°	332	355	388	408	420
70°	248	265	292	263	246
75°	166	183	163	165	170
80°	90	105	86	93	95
85°	36	35	38	40	40
90°	0	0	0	0	0

(END OF REPORT)